

I hold Amateur Extra Class License KB5PGY, which I have held since September 1991. I am at presently registered with Texas State Radio Amateur Civil Emergency Service and am the Assistance Emergency Coordinator -- Training for District 14, Southeast Quadrant for South Texas Amateur Radio Emergency Service (ARES). I am also an Official Relay Station for the South Texas section of the American Radio Relay League. I am also active in the Houston/Galveston SKYWARN operation, which is sponsored by the Houston/Galveston National Weather Service Office in League City, Texas.

I must preface all my opinions with the disclaimer that my opinions *do not* represent those of Texas State RACES, Houston/Galveston SKYWARN, the National Weather Service, or Texas District 14 ARES.

I must oppose RM-11392 on the following four points:

- 1.) Amending 47 CFR 97.221(c) is unnecessary. 47 CFR 97.3(a)(6) already sufficiently defines "Automatic Control". 47 CFR 97.3(a)(6) requires that all stations under automatic control, including those operating within 47 CFR 97.221, to be compliant with *all* FCC Rules. Furthermore, *all* Amateur Radio operators *are required* by 47 CFR 97.101 to both operate "in accordance with good engineering and good amateur practice" and "make the most effective use of the amateur service frequencies". This means that any user of any digital mode *must* take all *reasonable* steps to make sure that a frequency is clear before attempting a connect with an automatic digital station. This is the same burden on an Amateur Operator that exists on a voice HF frequency. The fact that Pactor 3 has the feature that changes both throughput and bandwidth in response to the condition of the communications channel *does not* release an operator accessing an automatic HF station from that burden.
- 2.) I must disagree with the philosophy contained in this Petition that the FCC must limit the bandwidth of *some* emissions but not *all* emissions. Pactor 3 has been singled out by this Petition as "inharmonious and incompatible with the accepted operating principles of Amateur Radio on the HF bands". By using the same measure, Double Sideband - Transmitted Carrier (DSB-TC) or standard AM is not permissible on voice bands since DSB-TC uses twice the bandwidth of Single Sideband - Suppressed Carrier (SSB-SC) or what is referred to as Single Sideband. An operator using DSB-TC can interfere with two SSB-SC communications due to the increased bandwidth and not know that this interference is being caused since a normal DSB-TC receiver will not decode SSB-SC since an AM receiver uses the carrier transmitted in DSB-TC to demodulate the AM signal. SSB-SC suppresses this carrier by definition. Since DSB-TC not only uses more bandwidth than SSB-SC, but also does not automatically demodulate SSB-SC and therefore interfere with other users of the spectrum, by the standards put forth by RM-11392, DSB-TC must be placed in specific subbands.
- 3.) This Petition also would have the unintended consequence of suppressing further research into the Digital Radio Mondiale (DRM) voice mode. DRM is an open standard developed by a consortium of international broadcasters including the Voice of America and electronics manufacturers. DRM is being developed for HF international broadcasting and promises FM sound quality while using a narrower bandwidth than the DSB-TC mode presently being used by international broadcasters. The higher clarity of DRM would be advantageous during emergency communications since there would be less repeats necessary on a busy voice channel. This would increase the number of messages that can be passed on a voice circuit during a given time frame

would be increased. The increased clarity also translates to higher accuracies of the messages passed. Since DRM uses a digital code to encode and decode sound information, a crucial question arises: is DRM a digital mode or a voice mode? If DRM is a digital mode, then it must be used exclusively in the digital subbands. Since DRM would not automatically detect whether or not a narrow band mode such as PSK31 or RTTY is being used by other operators, the potential for interference exists. By the standards put forth by this Petition, DRM would need to be in separate subbands since DRM is "inharmonious and incompatible with the accepted operating principles of Amateur Radio on the HF bands". If DRM is a voice mode, then DRM must be permitted in specific subbands in the voice subbands since the DRM encoder/decoder will not detect transmissions in standard SSB-SC. Therefore, DRM is "inharmonious and incompatible with the accepted operating principles of Amateur Radio on the HF bands".

- 4.) This is a thinly-veiled attempt to prohibit the use of the Winlink 2000 protocol from the MF and HF bands allocated to the Amateur Service. Even though the intent of the Petitioner was not to prohibit Winlink 2000 on the MF and HF bands, this Petition has been seized upon by the opponents of Winlink as a first step to this prohibition. I must oppose the prohibition of Winlink 2000 on the basis that it is used by both Texas State RACES and Texas ARES. Although both Texas RACES and Texas ARES utilize traditional voice circuits to send messages from one served agency to another, both organizations have placed an emphasis on Winlink 2000 for the fast, accurate, and reliable passage of critical messages. Hampering emergency communications by effectively prohibiting Winlink from HF and MF bands would be contrary to 47 CFR 97.1(a). The first principle of the ARS as set forth by 47 CFR 97.1(a) is one of public service with the emphasis placed on emergency communications. In addition, Winlink is not a mode of modulation; it is merely an interface program that interfaces a computer with a device such as a Terminal Node Controller or Multi Mode Controller so that computer can either send data to an other Winlink station or receive data from another Winlink station. Although the Winlink program automatically controls the transmitter, it is incumbent upon the user to make sure that the frequency is clear before transmitting. This principle also applies to all other users of Amateur spectrum. This means that a PSK31 operator cannot initiate a QSO during a Winlink exchange and then claim malicious interference. 47 CFR 97.101 does not, *nor should it*, prioritize by modulation mode. If the opponents of Winlink can produce a method of automatically passing messages from one station to another with the same or better speed, accuracy, and reliability as Winlink that overcomes the objections raised against Winlink put forth by these opponents, then I am in favor of that solution. If the opponents of Winlink are either unable or unwilling to create such a solution, then *do not* tie the hands of Amateurs who are active in emergency communications work by requiring them to use modes and methods that worked in the past but are now outdated by both technology and the needs of Homeland Security and Emergency Management. Forcing Amateurs active in emergency communications on HF to use either CW or Voice, requiring manual transcription of the message, decreases the throughput and therefore the number of messages that can be sent from served agency to served agency. This means that critical messages, including those with immediate life safety implications, will be delayed in the event of a communications emergency.

In conclusion, I must oppose RM-11392 since it would pose an undue regulatory burden on automatic forwarding networks, discriminate against certain wide-band modes by prohibiting them while allowing other wide-band modes to exist without any increased regulatory burden whatsoever, force emergency communicators to use modes on MF and HF with lower speed and accuracy than provided by automatic forwarding networks, and provide a *disincentive* for experimentation in the HF and MF bands.